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April 23, 2007

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(Attn: TSCA Section 8(e) Coordinator)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

CONTAINS NO CBI

Re: Phenol, 4,4'-(1-methylethylidene)bis-, CASRN 80-05-7



Dear Sir or Madam:

The following information is being submitted on behalf of the Polycarbonate/BPA Global Group of the American Chemistry Council. The Polycarbonate/BPA Global Group includes the following companies that manufacture bisphenol A in the US: Bayer Corporation, The Dow Chemical Company, General Electric Company, and Sunoco Inc.

This information is provided pursuant to current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substances Control Act. No determination has been made as to whether a significant risk of injury to health or the environment is actually presented by the findings.

The effects of bisphenol A (BPA) on terrestrial plants was examined according to OECD Guideline 208: Terrestrial Plant Test - Seedling Emergence and Seedling Growth Test. A limit test was performed in accordance with the guidelines.

The test substance was mixed with soil at 150 and 1000 mg/kg. Seeds from six plant varieties were introduced into the soil and monitored for emergence, dry weight biomass per shoot and percent biomass after 28 days relative to controls. The results are attached.

The results of this limit test, showing effects at 150 mg/kg and 1000 mg/kg, should be reviewed in light of other information showing actual or expected levels of BPA in soil. That information shows levels several orders of magnitude lower than the levels tested. For example:

- The UK Environment Agency is conducting an extensive environmental risk



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assessment for BPA on behalf of the European Union. Using emission information provided in the currently available drafts of the risk assessment and a multimedia model (EUSES), the regional soil concentration of BPA (regional predicted environmental concentration) in the risk assessment was estimated to be 0.07 micrograms/kg soil-wet weight (0.088 µg/kg-dry weight).

- Local concentrations have also been calculated for a few specific scenarios related to the application of sewage sludges containing BPA, which may be applied to land as a soil amendment. The local soil concentrations for these scenarios ranged from 1.5 to 633 micrograms/kg soil-wet weight (1.9 to 791 µg/kg-dry weight).
- We have also conducted an analysis of BPA concentrations in soil reported in the published literature. The data on measured soil concentrations in North America, although limited (34 samples), show the mean and 90th centile concentrations are 0.059 and 0.169 micrograms/kg soil-dry weight.

Questions may be addressed to me.

Sincerely,



Steven G. Hentges
Executive Director
Polycarbonate/BPA Global Group
American Chemistry Council

Attachment

**Summary of Percent Emergence and Seedling Dry Weight Biomass at
Test Termination (Day 21) for the Exposure of Six Plant Species to Bisphenol A**

Cabbage:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Pooled Control (%)
Control	48	0.2984	NA
Solvent Control	70	0.2740	NA
Pooled Control	NC	0.2855	NA
150	30	0.2818	1
1000	0	0.0000	100

Corn:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Pooled Control (%)
Control	100	1.3601	NA
Solvent Control	100	1.3094	NA
Pooled Control	100	1.3348	NA
150	95	0.7242	46
1000	90	0.0265	98

Oat:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Pooled Control (%)
Control	84	0.2106	NA
Solvent Control	94	0.1766	NA
Pooled Control	89	0.2038	NA
150	78	0.1487	27
1000	70	0.0092	95

Soybean:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Pooled Control (%)
Control	100	1.1321	NA
Solvent Control	95	1.0970	NA
Pooled Control	98	1.1145	NA
150	100	1.0132	9
1000	90	0.2293	79

Tomato:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Solvent Control (%)
Control	85	0.7933	NA
Solvent Control	80	0.5226	NA
Pooled Control	83	NC	NC
150	30	0.1681	68
1000	5	0.0005	100

Wheat:

Nominal Concentration (mg BPA/kg)	Mean Percent Emergence (%)	Mean Dry Weight Biomass per Shoot (gram)	Percent Reduction of Biomass Relative to Control (%)
Control	93	0.1671	NA
Solvent Control	70	0.1463	NA
Pooled Control	81	0.1567	NA
150	95	0.0784	50
1000	63	0.0035	98

Notes: NA =Not applicable
NC =Not calculated